

PERPETUAL MOTION FAN MODULE

BY

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Description of related Applications

This Application is a continuation of CO-pending Application serial number 10/075,569 filed on 02/13/2002, which claimed the benefit of prior applications serial number 60/303,871 filed on 07/09/2001, and 60/349,731 filed on 01/17/2002.

BACKGROUND OF THE INVENTION

This version of the invention is concerned with the field of battery operated devices, which employs a system of re-charging the batteries while the device is in use, therefore allowing the device to operate continuously.

PRIOR ART

A variety of battery operated devices are on the market, which uses re-chargeable batteries, but they all possess common limitations, which are as follows: their duration of operation is limited to the fact that the battery or batteries must be re-charged. This means that the said operation must be stopped for the re-charging or replacement of the said batteries. In addition to that the batteries get weaker and weaker as they are used, therefore not allowing full efficiency of the devices they are used to operate.

What is needed therefore to overcome these limitations is a way to replenish the batteries while the device is in use, so that no interruption of the operation would be needed for re-charging process.

DISCUSSION OF THE PRIOR ART

Attempts are continuously being made to fill this need as is exemplified in U.S. Patent No. 4,648,013, Self-charging Solar Batteries, issued to Raymond F. Curiel on March 3, 1987, Patent No. 5,998,965 Direct Plug In Power Tool Using Single Pair Of Contacts For Both AC And DC Currents, issued to Vito J. Carlucci, and Harold R. Taylor on

**December 7, 1999; U.S. Patent No. 4,677,362
Apparatus For Storing And Charging A Re-
chargeable Electric Tool, issued to Lawrence E.
House, II and William H. O'Connor on January 30,
1987.**

As illustrated by the background art, efforts are continuously being made in an attempt to develop ways of re-charging battery operated devices as they are being used, however all of these attempts fall short of their intended purpose, as they suffer from other limitations. For example with both the inventions of House and Carlucci, one must have an electrical outlet to perform the re-charging as the device is used. In a situation where no electrical outlet is available their Systems would not work. In addition the users mobility would be limited to the length of the charging cord. In Cruel's invention solar plates are installed in the device in order to use the Sun's rays to accomplish the re-charging of the battery as the device is used, however the Sun does not always shine, so that system cannot be relied on for continuous use. No prior effort provides the benefits attendant with the present invention. As such, it may be appreciated that there

is a continuing need for a new and improved system to replenish batteries of a battery operated device as said device is used. In this respect, the present version of the invention substantially departs from the conventional concepts, and designs of the prior art, and in so doing provides a system that substantially fulfills this need. Additionally, the prior patents and commercial techniques do not suggest the present inventive combination of component eliminates arraigned and configured as disclosed herein.

The present invention achieves its intended purposes, objects, and advantages through a new, useful and unobvious combination of methods steps and component elements, with the use of a minimum number of functioning parts, at a reasonable cost to manufacture, and by employing only readily available materials.

SUMMARY

The present version of the invention, which will be described in greater detail hereinafter, relates to the field of large battery operated devices which uses re-chargeable batteries. More specifically, This

version of the invention is concerned with a Battery operated Fan module, which incorporates a system of re-cycling the energy within the device; and using it over and over to replenish the batteries as the Fan is used, in order to produce continual normal operation of the device, for the normal life cycle of the batteries, and the electro/mechanical components. My version of the invention overcomes all of the shortcomings listed previously, in addition to novel aspects that will be described in detail hereinafter.

Described briefly, according to a typical embodiment, the invention presents a Fan Module for the purpose of moving air for the comfort of human kind, or animals, especially in a situation where no other electrical supply is available, or applicable. The device is comprised in general of a base or casement, two 12-volt deep cycle batteries connected in series to give 24-volts, two 24-volt motors wired to operate in a counter clockwise rotation, two chain and sprocket and drive shaft assemblies; and two 12-volt alternators which are used to replenish each battery separately using a double pulley and belt assemble on a common shaft.

The device also includes a fan that is driven by a pulley and belt drive, and meters switches and controls that are mounted on a control panel. As the device is operated the motors transforms the electrical current from the batteries, into turning motion. The said turning motion is transmitted to a drive shaft via the chain and sprocket assemblies. The said turning motion from said shaft operates a fan, and both alternators simultaneously. The fan blades causes the movement of air, while the alternators converts the said turning motion back to electrical energy, which is then used to replenish the batteries. As this process is repeated the device is kept in continuous operation. While some of the energy is lost due to friction, this is offset by the fact that both alternators together can produce more electrical energy than is needed to operate the device, hence the friction can be overcome. While the law of energy conversion states that one can only get as much energy out of a machine as is put into it, this system devises an exception to this rule. This is my explanation; since it takes 24-volts to operate the device, and each 12-volt alternator can produce 14.95-volts, this would mean we are using 24-volts to produce 14.95-volts, this does not violate the law

of energy conversion. The fact that we can duplicate this with the same turning motion means we can produce 29.9-volts from 24-volts; therefore we can over come all losses to due to friction and replenish the batteries, if the machine is made as efficiently as possible. There are some ways we can reduce friction, for example if all major parts as possible were to operate in a counter-clockwise rotation instead of clockwise, friction would be reduced, as they would be moving in concert with the earth's rotation. One can notice this principle in action as water drains from your bath tub, it turns on its own in a counter-clockwise rotation, in concert with the Earth's rotation. Another way to reduce friction is to ensure that the corresponding mating parts are in complete alignment, and everything is tight, and properly adjusted.

My invention, therefore, resides not in any one of these features per se, but rather in the particular combination of all of them herein disclosed. It is distinguished from the prior art in this particular combination of all of its structures for the functions specified.

In order that a detailed description of the invention may be better understood, and that the present contribution to the art can be more fully appreciated, additional features of the invention will be described hereinafter. It should be appreciated by those skilled in the art that the conception and the disclosed specific methods, and structures, may be readily utilized as a basis for modifying or designing other structures, for carrying out the same purposes of the present invention. It should be realized by those skilled in the art, that such equivalent methods and structures do not depart from the spirit and scope of the invention.

In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited to the details of construction, and to the arrangements, of the components, as set forth in the following description, or illustrated in the drawings. The invention is capable of other embodiments, and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology, and terminology employed herein, are for the purpose

of description, and should not be regarded as limiting.

As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be utilized as a basis for the designing of other structures, methods and systems for carrying out the several purposes of the present invention.

Further, the purpose of the foregoing abstract is to enable the U.S. Patent and Trademark Office, and the public generally, and especially the scientists, engineers and practitioners in the art, who are not familiar with patent or legal terms or phraseology, to determine quickly from a cursory inspection the nature and essence of the technical disclosure of the application. The abstract is neither intended to define the invention of the application, nor is it intended to be limiting as to the scope of the invention in any way.

Accordingly, it is an object of my version of the invention to provide a low-cost, easy-to-

manufacture, and easy-to-market continuous operating battery operated fan module.

A further object of my version of the invention is to provide an easy-to use and versatile continuous operating battery operated fan module.

A significant object of the invention is to provide a continuous operating battery operated fan module that is portable and transportable, and can be easily stored when not needed.

A final but very significant object of the invention is to provide a continuous operating battery operated fan module that is operable where no electric nor sunshine is available.

For a better understanding of the invention, its operating advantages and the specific objects attained by its uses, references should be made to the accompanying drawings, and descriptive matter, in which there is illustrated a preferred embodiment of the invention. The foregoing has outlined some of the more pertinent objects of the invention. These objects should be construed to be

merely illustrative of some of the more prominent features, and applications of the present invention. Many other beneficial results can be attained by applying the disclosed invention in a different manner, or by modifying the invention within the scope of the disclosure. Accordingly, other objects and a fuller understanding of the invention may be had, by referring to the summary of the invention, and the detailed description of the preferred embodiment, in addition to the scope of the invention illustrated by the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

The foregoing and other objects, features and advantages of the invention will become more fully understood from the following description of the preferred embodiment of the invention, as illustrated in the accompanying drawings, in which like reference characters refer to the same parts throughout different views. The drawings are not necessarily to scale, emphasis instead being placed upon illustrating the principles of the invention.

FIG. 1 is a perspective view of a continuous operating battery operated fan module illustrating the inter-relationship of all major components.

FIG. 1A is a cut-away perspective view illustrating the wiring configuration.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Description

referring now to the drawings and, in particular, to **FIGS. 1 & 1A**, wherein there is illustrated a typical embodiment of a continuous operating battery operated fan module **27**. The present version of the invention **27** is constructed of materials and components that are light weight, durable, and resistant to corrosion and oxidization, such as plastic, aluminum, carbon steel, wood, various composite materials or a combination thereof. The device **27** consist in a main wooden or non-conducted material base or housing **46**, of the following parts (note that all switches, lights and meters, should be mounted on separate metal control panels, not shown, or be separated on a single panel, due to the fact that there are three

separate circuits whose grounds must not inter-connect): a 24-volt meter 40 to show battery condition, a 24-volt hour meter 41 to indicate how many hours device has operated, a 24-volt emergency shut/off switch 42 to shut down device in an emergency, a 24-volt instrument fuse 44, a pair of 24-volt motor circuit breaker 45 & 69, a pair of 12-volt deep cycle batteries 48 & 48A which are connected in series to give 24-volts, a pair of I-HP-24-volt motors 50 & 50A which are wired to operate in a counter clockwise rotation, a pair of 12-volt fuses 52 & 88, a pair of 12-volt alternators 54 & 54A which are mounted on supports 74 and used to replenish batteries B1 & B2 separately, a pair of pulley belts 56 which is used to drive each alternator with pulley 58, and a pulley belt 57 which is used with pulley 59 to drive fan assembly 62. The device 27 also includes a pair of 24-volt light modules 60 & 94 which is used to indicate when drive motors M1 & M2 are in operation, a pair of 24-volt switches 64 & 92 which used to turn motors M1 & M2 on and off, a pair of 12-volt switches 66 & 86 which are used to excite alternator A1 & A2, a pair of 12-volt lights 68 & 90 which are used to show when alternators are

excited. The device 27 also includes a computerized control device 72 which is optional, and can be used to control the on and off operation of device 27 in the event said device is turned off for extended periods. The computer 72 would monitor device 27 and turn it on automatically in order to keep the batteries refurbished. Computer 72 also can be used for other functions not covered in this application. The device 27 also consist of a pair of chain and sprocket drive assemblies 78 & 78A which are mounted on bridge supports 80 and used to operate horse power load shaft 76, via drive shaft 76A. Refer to drawing reference numerals and nomenclature for all values, these values does not limit the application in any way as the device 27 can be powered by any other voltage value, or use of other rating.

There are three basic goals that must be achieved in order to achieve perpetual motion of device 27, the first is to achieve enough torque to move all the load and work to be performed by device 27, this can be accomplished by choosing a load torque ratio sufficient to perform all task. Next a speed ratio must be chosen to return the alternator to speed

enough to operate efficiently. Next enough volts and amps must be developed to overcome friction and refurbish the batteries, as was described in the summary of the application. Once these three goals are satisfied and the device 27 is properly assembled as shown in FIGS. 1 & 1A the system should be ready for operation.

Referring now to FIG. 1A, The position of all three circuits should be noted as illustrated by the drawing, to prevent cross grounding. Wires 84, 24-volt main and wire 85, 24-volt negative. Wire 96, 12-volt positive and wire 97, 12-volt negative to alternator (A1). Wire 98, 12-volt negative and wire 99, 12-volt positive to alternator (A2). The sequence of operation are as following: ensure that both batteries B1 & B2 are fully charged, energize motor (M1) by closing switch 64, the system should be put in motion, and fan blades 70(FIG. 1) should start rotating, and motor on light 60 should come on. After 60 seconds close switch 92, motor (M2) should be put in motion and motor on light 94 should come on. Next close switches 66 & 86, both alternators should be excited and alternator exciter lights 68 & 90 should come on. The unit is now

ready to replenish batteries 48 & 48A on a as needed basis. The said action should set in motion continual operation without need for a separate charging operation of device 27, as long as said device is in the on position, and all component parts are operating properly. The said action will create perpetual motion, of device 27. The said actions makes device 27 an improvement over the sighted prior art attempts and products, and as such is patentable, which action the Pro Se applicant request in accordance with all appropriate patent laws, and statutes.

In order to shut-down device 27 in an emergency, close emergency switch 42(ES), next close all other switches. In a non-emergency shutdown, check volt meter 40(VM), to ensure that alternators have completed a charging cycle, then close emergency switch, then close all other switches. Device 27 for the purpose of this application is a manual device. If device 27 was an automatic unit, computer 72 would walk you through a start-up and shut-down sequences.

DRAWING REFERENCE NUMERALS AND NOMENCLATURE

- 40 24-Volt Meter (VM)**
- 41 24-Volt Hour Meter (HM)**
- 42 24-Volt-175-Amp Emergency Switch (ES)**
- 44 24-Volt-20-Amps Instrument Fuse (F)**
- 45 24-Volt-50-Amp Motor Circuit Breaker (F)**
- 46 Module Base Or Housing**
- 48 12-Volt Deep Cycle Battery (B1)**
- 48A 12-Volt Deep Cycle Battery (B2)**
- 50 24-Volt-1-HP Motor (M1)**
- 50A 24-Volt-1-HP Motor (M2)**
- 52 12-Volt-10-Amp Fuse (F)**
- 54 12-Volt-78-Amp Alternator (A1)**
- 54A 12-Volt-78-Amp Alternator (A2)**
- 56 2) 5/8"-v, Alternator Pulley Belts**
- 57 5/8"-v, Fan Pulley Belt**
- 58 5/8"-double-v, Alternator Pulley (P)**
- 59 5/8"-v, Work Load Fan Pulley**
- 60 Motor On Light**
- 62 Fan Assembly**
- 64 Motor On/Off Switch, 24-Volt-60-Amps**
- 66 12-Volt Alternator Exciter Switch**
- 68 12-Volt Alternator Exciter Light**
- 69 24-Volt-50-Amp Motor Circuit Breaker (F)**
- 70 Fan Blades**

- 72 Computerize Control Device (CP)**
- 74 Alternator Supports With Adjustment**
- 76 Horse Power Load Shaft**
- 76A Drive Shaft Assembly**
- 78 Chain & Sprocket Assembly (CS1) 7-1 Load Ratio**
- 78A Chain & Sprocket Assembly (CS2) 7-1 Load Ratio**
- 80 Bridge Supports For Pillow Blocks**
- 82 Pillow Blocks**
- 84 24-Volt Main Hot Wire**
- 85 24-Volt Negative Wire**
- 86 12-Volt Alternator Exciter Switch**
- 88 12-Volt-10-Amp Fuse (F)**
- 90 12-Volt Alternator Exciter Light**
- 92 24-Volt-60-Amp Motor On/Off Switch**
- 94 24-Volt Motor On Light**
- 96 12-volt positive wire to (A1)**
- 97 12-Volt Negative Wire to (A1)**
- 98 12-Volt Negative Wire to (A2)**
- 99 12-Volt Positive Wire to (A2)**